

FIG. 1 Schematic of gel protein extraction apparatus

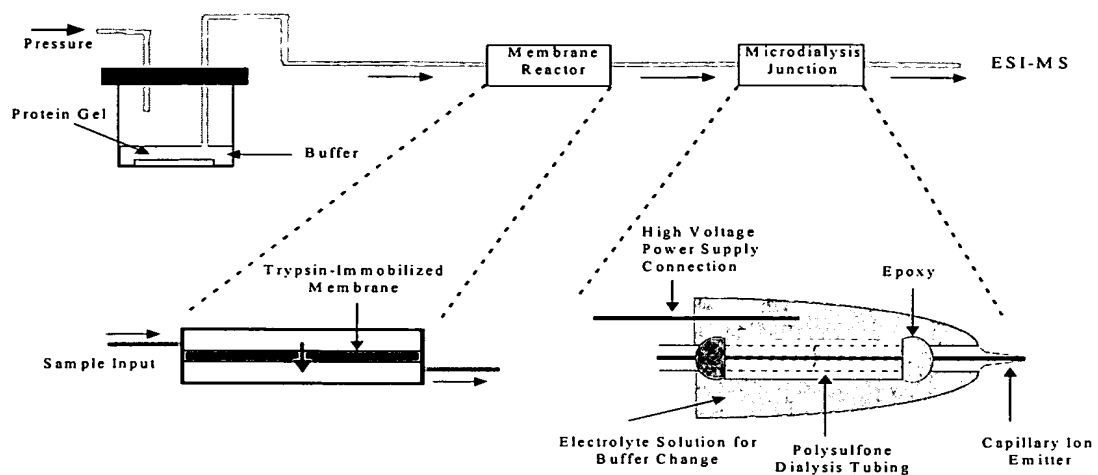


FIG. 2 Schematic of component-level platform for rapid and sensitive identification of proteins resolved on polyacrylamide gels.

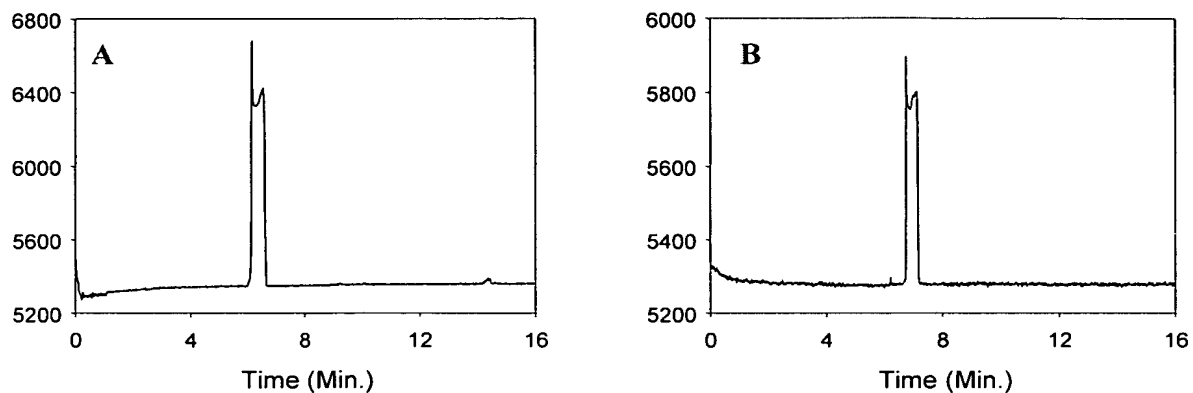


Fig. 3 Electropherograms of (A) electrokinetically injected SDS-cytochrome C complex in CZE with a concentration of 0.5 mg/ml and (B) extracted SDS-cytochrome C complex from SDS-PAGE with a protein loading of 100 ng.

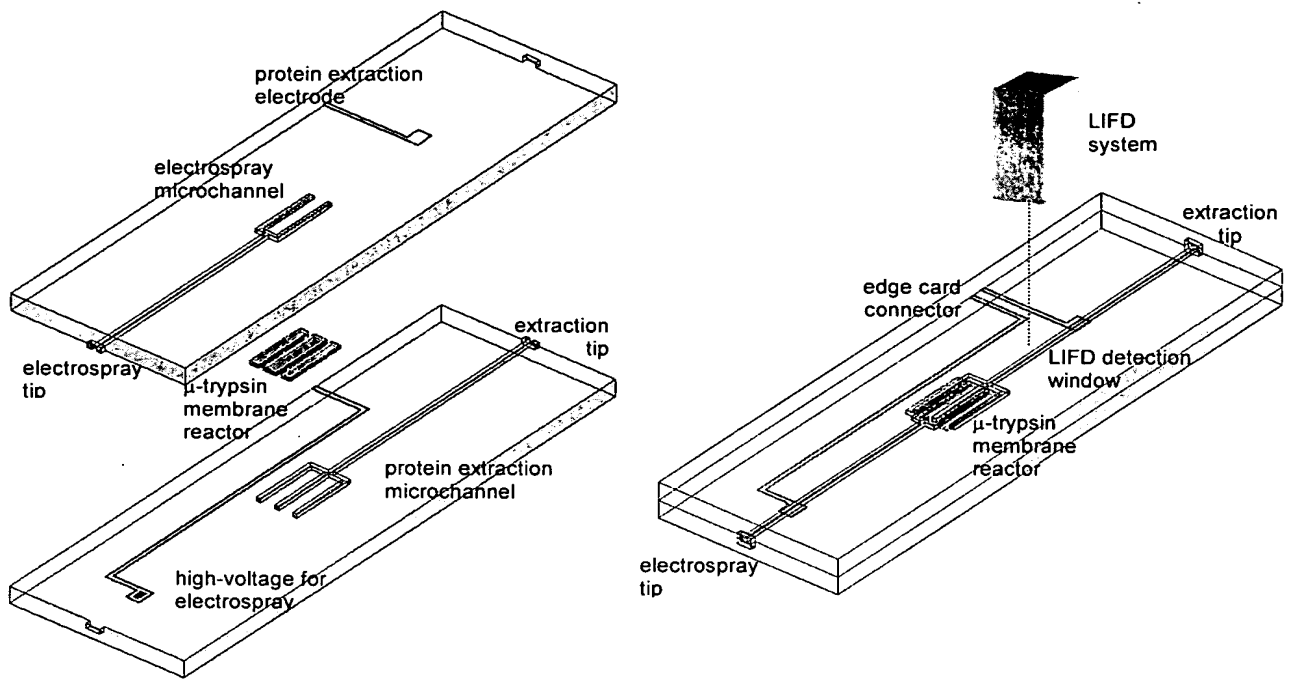
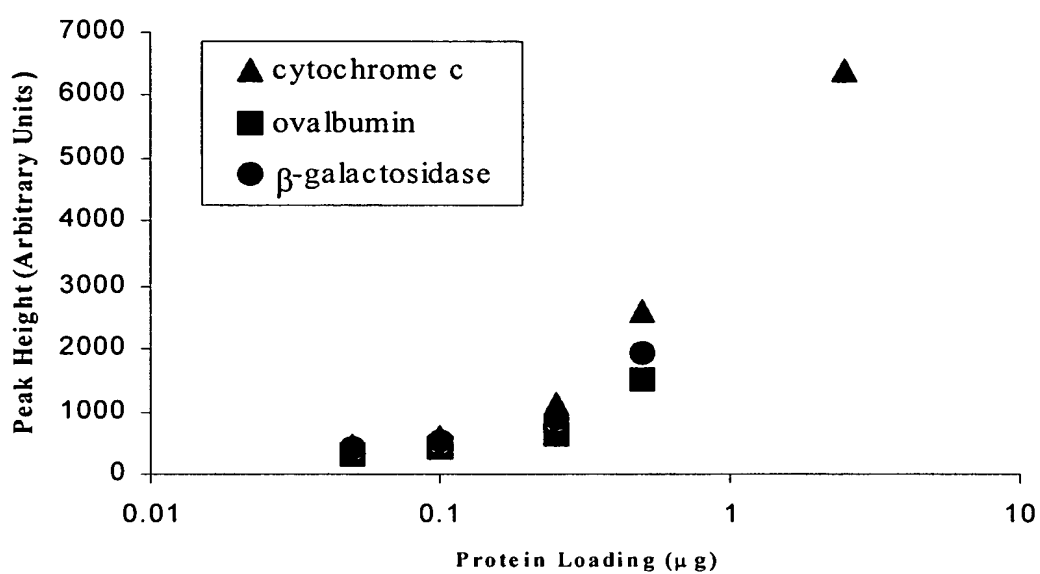


Fig. 4 (a) exploded view of a gPEP cartridge, and (b) assembled cartridge including laser-induced fluorescence detection system (drawings not to scale).



Dependence of peak heights of extracted proteins upon protein mass loadings.

Fig. 5

Fig. 6A

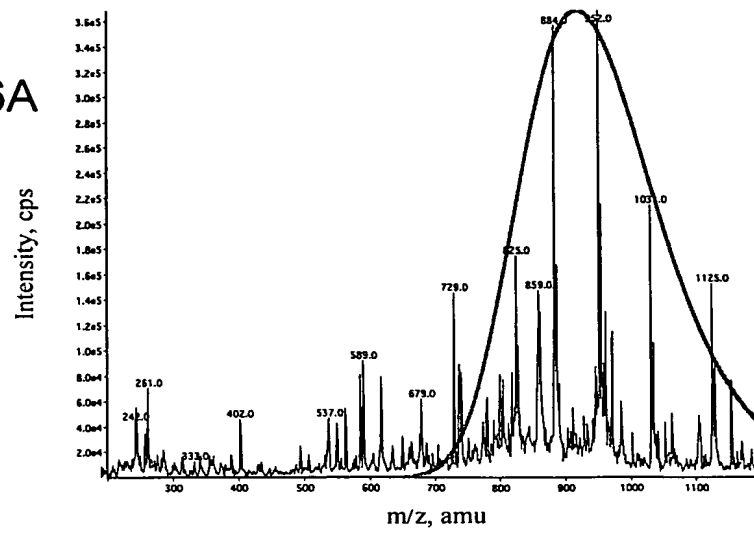


Fig. 6B

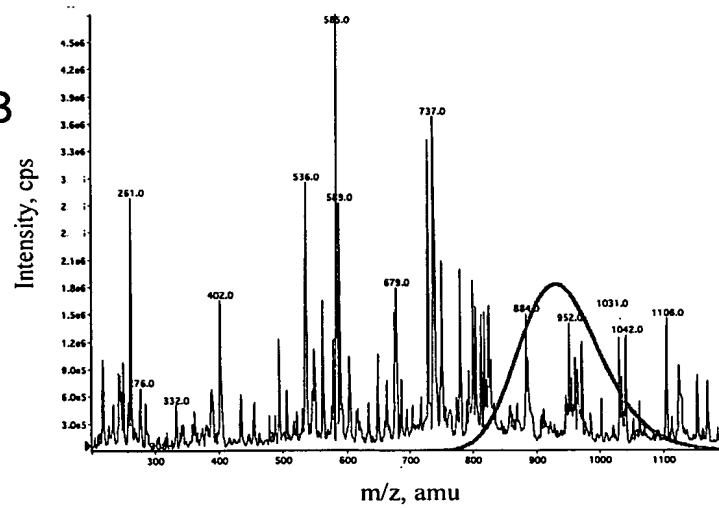


Fig. 6C

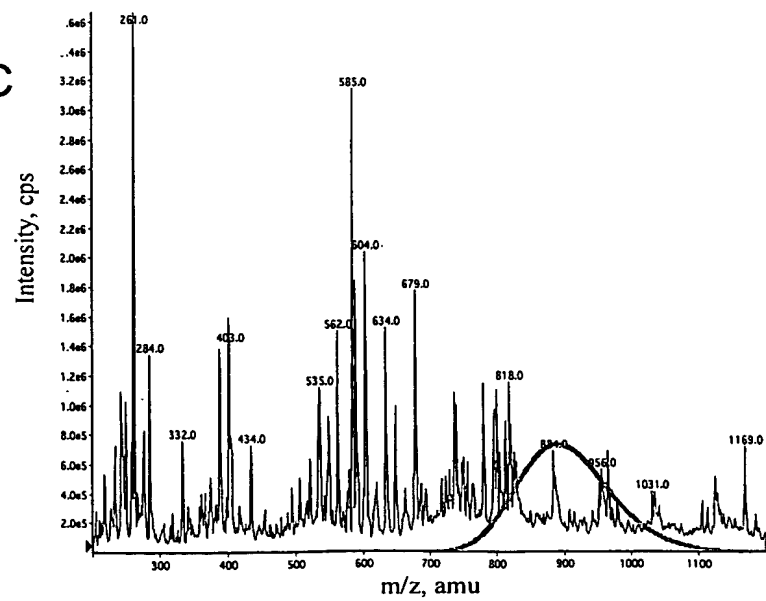


Fig. 7A

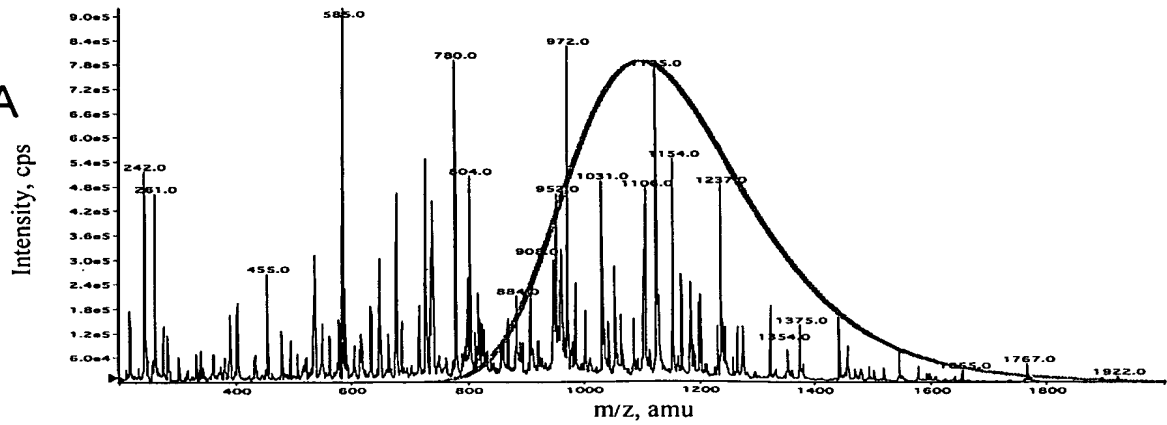
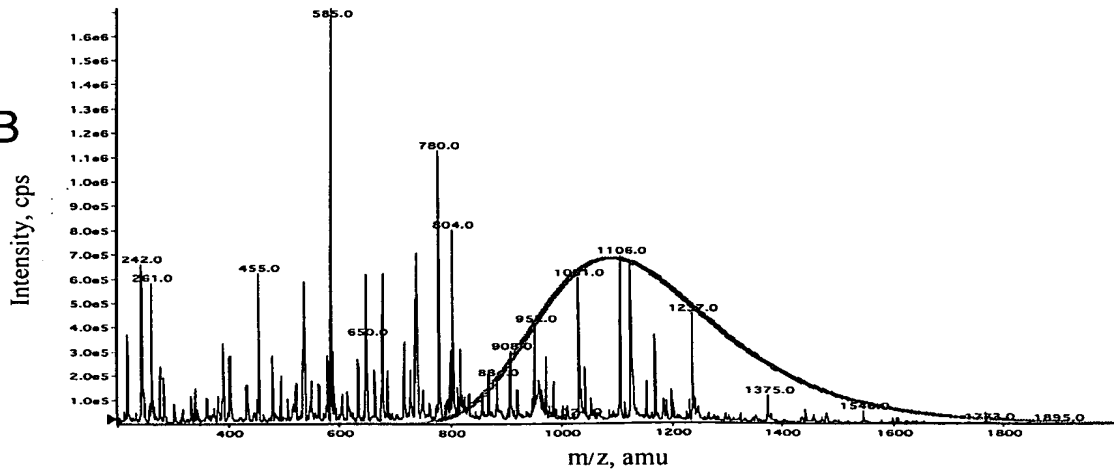


Fig. 7B



Reaction temperature dependence of trypsin digestion in a PVDF membrane at a sample flow rate of 0.3 ml/min: (A) 40°C and (B) 50°C.

Fig. 8A

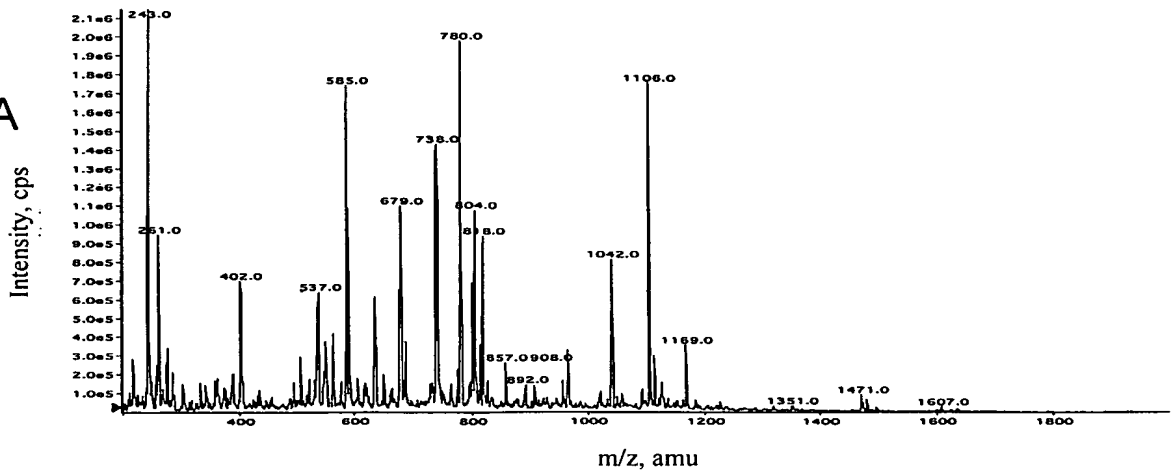
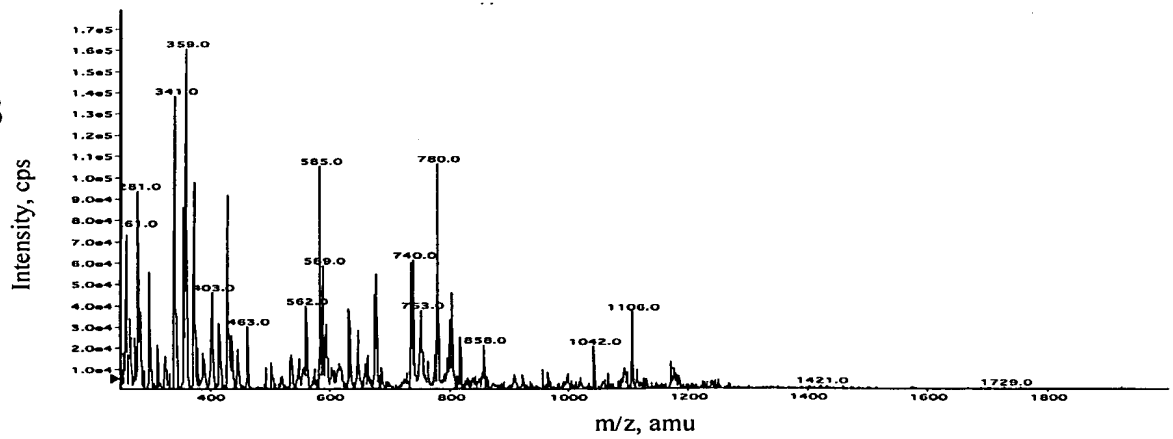


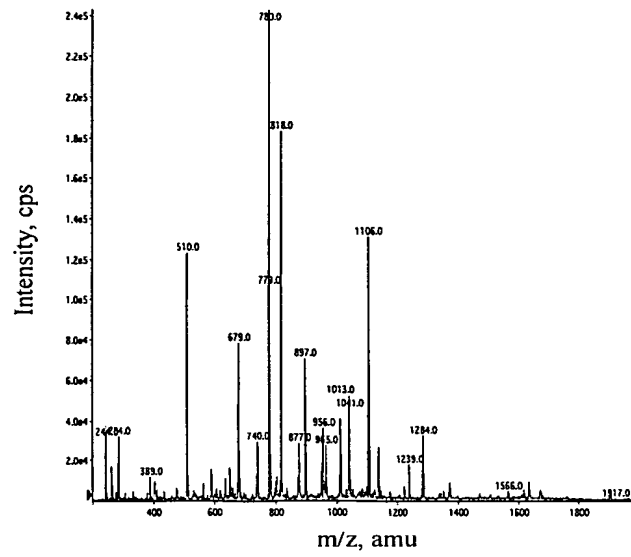
Fig. 8B



Protein concentration dependence of trypsin digestion in a PVDF membrane at room temperature and a sample flow rate of 0.3 ml/min: (A) 0.1 mg/ml and (B) 10 mg/ml.



Fig. 9



The positive ESI mass spectrum of extracted and digested cytochrome C peptides.

Fig. 10

